APPENDIX B

VERSION WITH MARKINGS TO SHOW CHANGES MADE 37 C.F.R. § 1.121(b)(iii) AND (c)(ii)

CLAIMS:

13. A transmission power control method according to [any one of claims 1 to 12] <u>claim 1</u>, characterized in that:

if a frame error is detected, the control target value is increased; and

if no frame error is detected, the control target value is gradually decreased to match channel quality to a channel quality target value.

14. A transmission power control method according to [any one of claims 1 to 12] <u>claim 1</u>, characterized in that:

if a frame error is detected, the control target value is increased; and

if no frame error is detected, the control target value is gradually decreased to match a frame error rate to a channel quality target value.

15. A transmission power control method according to [any one of claims 1 to 12] <u>claim 1</u>, characterized in that

if a frame error is detected, the control target value is increased by a first predetermined value; and

if no frame error is detected, the control target value is gradually decreased such that the control target value is decreased by the first predetermined value in an average time during which a frame error is detected when a frame error rate is set to a desired value.

16. A transmission power control method according to [any one of claims 1 to 12] <u>claim 1</u>, characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value; and

if no frame error is detected, the control target value is gradually decreased such that the control target value is decreased by the first predetermined value while frames fewer than a reciprocal of a channel quality target value based on a frame error rate by one are received.

17. A transmission power control method according to [any one of claims 1 to 12] <u>claim 1</u>, characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a ratio of the first predetermined value to the second predetermined value is determined in accordance with a channel quality target value.

18. A transmission power control method according to [any one of claims 1 to 12] <u>claim 1</u>, characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a ratio of the first predetermined value to the second predetermined value is determined in accordance with a channel quality target value based on a frame error rate.

19. A transmission power control method according to [any one of claims 1 to 12] <u>claim 1</u>, characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a ratio of the first predetermined value to the second predetermined value is set to a reciprocal of a channel quality target value based on a frame error rate.

20. A transmission power control method according to [any one of claims 1 to 12] <u>claim 1</u>, characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a ratio of the first predetermined value to the second predetermined value is set to a value smaller than a reciprocal of a channel quality target value based on a frame error rate by one.

21. A transmission power control method according to [any one of claims 1 to 12] <u>claim 1</u>, characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a product of a channel quality target value based on a frame error rate and the first predetermined value is set as the second predetermined value.

22. A transmission power control method according to [any one of claims 1 to 12] <u>claim 1</u>, characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a product of a channel quality target value based on a frame error rate and the first predetermined value is equal to a product of a value smaller than one by a channel quality target value based on a frame error rate and the second predetermined value.

25. A transmission power control apparatus according to [a] claim 23 [or 24], characterized in that:

if a frame error is detected, the control target value is increased, and

if no frame error is detected, the control target value is gradually decreased to match channel quality to a channel quality target value.

26. A transmission power control apparatus according to [a] claim 23 [or 24], characterized in that:

if a frame error is detected, the control target value is increased; and

if no frame error is detected, the control target value is gradually decreased to match a frame error rate to a channel quality target value.

27. A transmission power control apparatus according to [a] claim 23 [or 24], characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and

if no frame error is detected, the control target value is gradually decreased such that the control target value is decreased by the first predetermined value in an average time during which a frame error is detected when a frame error rate is set to a desired value.

28. A transmission power control apparatus according to [a] claim 23 [or 24], characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value; and

if no frame error is detected, the control target value is gradually decreased such that the control target value is decreased by the first predetermined value while frames fewer than a reciprocal of a channel quality target value based on a frame error rate by one are received.

29. A transmission power control apparatus according to [a] claim 23 [or 24], characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a ratio of the first predetermined value to the second predetermined value is determined in accordance with a channel quality target value.

30. A transmission power control apparatus according to [a] claim 23 [or 24], characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a ratio of the first predetermined value to the second predetermined value is determined in accordance with a channel quality target value based on a frame error rate.

31. A transmission power control apparatus according to [a] claim 23 [or 24], characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a ratio of the first predetermined value to the second predetermined value is set to a reciprocal of a channel quality target value based on a frame error rate.

32. A transmission power control apparatus according to [a] claim 23 [or 24], characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a ratio of the first predetermined value to the second predetermined value is set to a value smaller than a reciprocal of a channel quality target value based on a frame error rate by one.

33. A transmission power control apparatus according to [a] claim 23 [or 24], characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a product of a channel quality target value based on a frame error rate and the first predetermined value is set as the second predetermined value.

34. A transmission power control apparatus according to [a] claim 23 [or 24], characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a product of a channel quality target value based on a frame error rate and the first predetermined value is equal to a product of a value smaller than one by a channel quality target value based on a frame error rate and the second predetermined value.

- 37. A mobile station according to [a] claim 35 [or 36], characterized in that if a frame error is detected, the control target value is increased, and if no frame error is detected, the control target value is gradually decreased to match channel quality to a channel quality target value.
 - 38. A mobile station according to [a] claim 35 [or 36], characterized in that:

if a frame error is detected, the control target value is increased, and

if no frame error is detected, the control target value is gradually decreased to match a frame error rate to a channel quality target value.

39. A mobile station according to [a] claim 35 [or 36], characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value; and

if no frame error is detected, the control target value is gradually decreased such that the control target value is decreased by the first predetermined value in an average time during which a frame error is detected when a frame error rate is set to a desired value.

40. A mobile station according to [a] claim 35 [or 36], characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value; and

if no frame error is detected, the control target value is gradually decreased such that the control target value is decreased by the first predetermined value while frames fewer than a reciprocal of a channel quality target value based on a frame error rate by one are received.

- 41. A mobile station according to [a] claim 35 [or 36], characterized in that: if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a ratio of the first predetermined value to the second predetermined value is determined in accordance with a channel quality target value.
- 42. A mobile station according to [a] claim 35 [or 36], characterized in that: if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a ratio of the first predetermined value to the second predetermined value is determined in accordance with a channel quality target value based on a frame error rate.
- 43. A mobile station according to [a] claim 35 [or 36], characterized in that: if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a ratio of the first predetermined value to the second predetermined value is set to a reciprocal of a channel quality target value based on a frame error rate.

20

44. A mobile station according to [a] claim 35 [or 36], characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a ratio of the first predetermined value to the second predetermined value is set to a value smaller than a reciprocal of a channel quality target value based on a frame error rate by one.

- 45. A mobile station according to [a] claim 35 [or 36], characterized in that: if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a product of a channel quality target value based on a frame error rate and the first predetermined value is set as the second predetermined value.
- 46. A mobile station according to [a] claim 35 [or 36], characterized in that: if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a product of a channel quality target value based on a frame error rate and the first predetermined value is equal to a product of a value smaller than one by a channel quality target value based on a frame error rate and the second predetermined value.
- 55. A base station according to [any one of claims 47 to 54] <u>claim 47</u>, characterized in that: if a frame error is detected, the control target value is increased; and if no frame error is detected, the control target value is gradually decreased to match channel quality to a channel quality target value.
- 56. A base station according to [any one of claims 47 to 54] <u>claim 47</u>, characterized in that: if a frame error is detected, the control target value is increased; and if no frame error is detected, the control target value is gradually decreased to match a frame error rate to a channel quality target value.
- 57. A base station according to [any one of claims 47 to 54] claim 47, characterized in that: if a frame error is detected, the control target value is increased by a first predetermined value; and

if no frame error is detected, the control target value is gradually decreased such that the control target value is decreased by the first predetermined value in an average time during which a frame error is detected when a frame error rate is set to a desired value.

[57.] 58. A base station according to [any one of claims 47 to 54] <u>claim 47</u>, characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value; and

if no frame error is detected, the control target value is gradually decreased such that the control target value is decreased by the first predetermined value while frames fewer than a reciprocal of a channel quality target value based on a frame error rate by one are received.

- 59. A base station according to [any one of claims 47 to 54] <u>claim 47</u>, characterized in that: if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a ratio of the first predetermined value to the second predetermined value is determined in accordance with a channel quality target value.
- 60. A base station according to [any one of claims 47 to 54] <u>claim 47</u>, characterized in that: if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a ratio of the first predetermined value to the second predetermined value is determined in accordance with a channel quality target value based on a frame error rate.
- 61. A base station according to [any one of claims 47 to 54] claim 47, characterized in that: if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a ratio of the first predetermined value to the second predetermined value is set to a reciprocal of a channel quality target value based on a frame error rate.
 - 62. A base station according to [any one of claims 47 to 54] claim 47, characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a ratio of the first predetermined value to the second predetermined value is set to a value smaller than a reciprocal of a channel quality target value based on a frame error rate by one.

- 63. A base station according to [any one of claims 47 to 54] <u>claim 47</u>, characterized in that: if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a product of a channel quality target value based on a frame error rate and the first predetermined value is set as the second predetermined value.
- 64. A base station according to [any one of claims 47 to 54] <u>claim 47</u>, characterized in that: if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a product of a channel quality target value based on a frame error rate and the first predetermined value is equal to a product of a value smaller than one by a channel quality target value based on a frame error rate and the second predetermined value.
- 72. A control station according to [any one of claims 65 to 71] <u>claim 65</u>, characterized in that:

if a frame error is detected, the control target value is increased; and

if no frame error is detected, the control target value is gradually decreased to match channel quality to a channel quality target value.

73. A control station according to [any one of claims 65 to 71] <u>claim 65</u>, characterized in that:

if a frame error is detected, the control target value is increased; and

if no frame error is detected, the control target value is gradually decreased to match a frame error rate to a channel quality target value.

74. A control station according to [any one of claims 65 to 71] <u>claim 65</u>, characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value; and

if no frame error is detected, the control target value is gradually decreased such that the control target value is decreased by the first predetermined value in an average time during which a frame error is detected when a frame error rate is set to a desired value.

75. A control station according to [any one of claims 65 to 71] <u>claim 65</u>, characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value; and

if no frame error is detected, the control target value is gradually decreased such that the control target value is decreased by the first predetermined value while frames fewer than a reciprocal of a channel quality target value based on a frame error rate by one are received.

76. A control station according to [any one of claims 65 to 71] <u>claim 65</u>, characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a ratio of the first predetermined value to the second predetermined value is determined in accordance with a channel quality target value.

77. A control station according to [any one of claims 65 to 71] <u>claim 65</u>, characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a ratio of the first predetermined value to the second predetermined value is determined in accordance with a channel quality target value based on a frame error rate.

78. A control station according to [any one of claims 65 to 71] <u>claim 65</u>, characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and

a ratio of the first predetermined value to the second predetermined value is set to a reciprocal of a channel quality target value based on a frame error rate.

79. A control station according to [any one of claims 65 to 71] <u>claim 65</u>, characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a ratio of the first predetermined value to the second predetermined value is set to a value smaller than a reciprocal of a channel quality target value based on a frame error rate by one.

80. A control station according to [any one of claims 65 to 71] <u>claim 65</u>, characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a product of a channel quality target value based on a frame error rate and the first predetermined value is set as the second predetermined value.

81. A control station according to [any one of claims 65 to 71] claim 65, characterized in that:

if a frame error is detected, the control target value is increased by a first predetermined value, and if no frame error is detected, the control target value is decreased by a second predetermined value; and a product of a channel quality target value based on a frame error rate and the first predetermined value is equal to a product of a value smaller than one by a channel quality target value based on a frame error rate and the second predetermined value.

- 84. A transmission power control method according to [a] claim 82 [or 83], characterized in that upper and lower limits are set in a range in which the signal-to-interference ratio reference value is changed.
- 85. A transmission power control method according to claim 82 [or 83], characterized in that error detection information is a Cyclic Redundancy Check code.

- 88. A transmission power control apparatus according to [a] claim 86 [or 87], characterized in that upper and lower limits are set in a range in which the signal-to-interference ratio reference value is changed.
- 89. A transmission power control apparatus according to claim 86 [or 87], characterized in that error detection information is a Cyclic Redundancy Check code.